RIFA Environmental Monitoring Field Notes
Environmental Hazards Assessment Program
Environmental Monitoring and Pest Management Branch
Department of Pesticide Regulation
830 K Street, Sacramento, CA 95814

Trip Date: October 27, 1999

Purpose: To share monitoring data and draft memo with impacted nurseries and to discuss voluntary mitigation measures to prevent insecticide runoff.

Attendees
UC Cooperative Extension: John Kabashima and Darren Haver
Orange County Agric. Comm.: John Ellis at sites 1 & 2, Brian Danker;
Mike Bennett at sites 3 & 4.
DPR: Kean S. Goh and Dave Kim.

1) el modeno Gardens, Inc. at Irvine

Met with Jo-Anne Newton (Vice President) and Mike Proffitt (Director, Production). Provided draft memo and discussed monitoring results taken on 6/25 at el modeno's drain at Bee Canyon & Portola Pkwy. Samples showed detection of fenoxycarb, diazinon, malathion, and methyl parathion. DPR will further investigate the source and verify detection for methyl parathion. We expressed concern on the high diazinon residue in runoff water. Discussed RIFA insecticides' physico-chemical properties, environmental fate and aquatic toxicity. Discussed potential mitigation measures. el modeno agreed to fine tune irrigation practices to reduce runoff, improve application and selection of insecticides, consider holding or filtering runoff water using vegetative buffer stripes. We suggested working with UCEE, Ag. Comm. Office and DPR to test mitigation measures. DPR will continue to provide monitoring data and to assess progress in mitigating runoff.

2) Hines Nurseries at Irvine

Met with George Gutman, (Manager, Nursery Service) and Jeff Feaster. Provided a draft memo of sampling results. Discussed monitoring results taken on 5/21and 6/25 at Hines drain (Central Irvine Channel at Bryan St.), samples showed detection of bifenthrin, diazinon, malathion and methyl parathion. Hines stated they do not use methyl parathion and DPR will review data to try and determine source or accuracy of detection. We showed contribution of residues from el modeno into Hines. We expressed concern of high residue concentration found in runoff water. We discussed RIFA insecticides' physico-chemical properties, environmental fate and aquatic toxicity and potential mitigation measures. Hines agreed to fine tune irrigation practices, water recirculating system; evaluate siting of treatment location and selection of insecticides; consider holding water in the initial hours of the first storm after a period of insecticides application; consider filtering runoff water through a vegetative stripe. Hines will send us a copy of their current mitigation plan with the Water Board. We suggested the nursery working with UCCE, Ag Comm., and DPR to test mitigation measures. DPR will consider adding or changing monitoring site to more directly measure the effectiveness of mitigation measures.

3) T-Y Nursery, Inc. at Trabuco Canyon

Met with Buzz Uber, Arturo Ramos, Alfonso Ramos, and Terry Yasutake. Provided a draft sampling result memo. Discussed monitoring results taken on 3/25 and 4/6 at T-Y drains into Arroyo Trabuco. Samples showed detection of chlorpyrifos, diazinon, malathion, and methyl parathion. We expressed concern about the high concentration of chlorpyrifos in rain runoff. We advised pumping initial hours of storm water into their recirculating/holding pond. Shared information on RIFA insecticides' physico-chemical properties, environmental fate and aquatic toxicity and potential mitigation measures. T-Y will fune tune application and selection of insecticide, turn on the pump to pump and hold the early hours of storm runoff, and consider vegetative filter strips. We suggested they work with UCCE, Ag.Comm, and DPR to test mitigation measures. DPR will continue to provide monitoring to access progress.

4) Sakaida Nursery at Trabuco Canyon

Met with Henry Sakaida. Provided a draft memo of results and discussed data taken on 3/25 and 4/6 from input of residential area at Trabuco Highlands and combined output into Robertson Ranch. Data showed residential input of chlorpyrifos, diazinon, malathion, and fonofos; and nursery output of chlorpyrifos, diazinon, malathion, and methyl parathion. We expressed concern on the high concentration of chlorpyrifos in the runoff water. We shared information on RIFA insecticides' physico-chemical properties, environmental fate and aquatic toxicity and potential mitigation measures. Mr. Sakaida showed us the application area and discussed establishing vegetative buffer stripes. UCCE will assist Sakaida in selection of plant species, and DPR agreed to test mitigation measures in providing residue analysis to assess effectiveness of mitigation measures.

Ksgoh 11/27/1999